

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
5 February 2004 (05.02.2004)

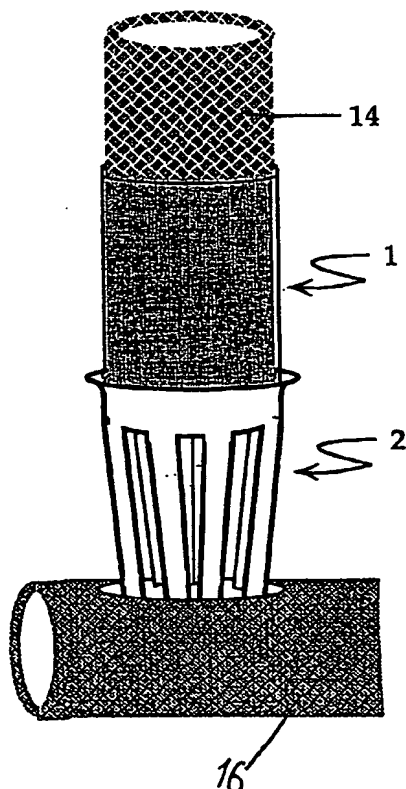
PCT

(10) International Publication Number
WO 2004/010898 A1

- (51) International Patent Classification⁷: **A61F 2/06 // A61B 17/11**
- (21) International Application Number: **PCT/NO2003/000258**
- (22) International Filing Date: **25 July 2003 (25.07.2003)**
- (25) Filing Language: **Norwegian**
- (26) Publication Language: **English**
- (30) Priority Data:
20023605 29 July 2002 (29.07.2002) NO
- (71) Applicants and
(72) Inventors: **ROY, Sumit [IN/NO]; Industrigata 71A, N-0357 Oslo (NO); FOSSE, Erik [NO/NO]; Maridalsveien 71B, N-0458 Oslo (NO); ELLE, Ole, Jakob [NO/NO]; Jolly Kramer-Johansensgt. 8, N-0475 Oslo (NO).**
- (74) Agent: **ONSAGERS AS; P.O. Box 6963 St. Olavs plass, N-0130 Oslo (NO).**
- (81) Designated States (*national*): **AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (*regional*): **ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,**

[Continued on next page]

(54) Title: **METHOD AND DEVICE FOR INTERCONNECTION OF TWO TUBULAR ORGANS**



(57) Abstract: A method for interconnection of two tubular organs (14, 16) via an opening at one end (8) of an end portion (15) of a first organ (14) and an aperture (17) in a side wall of a second organ (16). According to the invention the end portion (15) is initially passed through a first passage (32) of a first element (1) until the end portion (15) projects past an end edge (4) of the element (1), whereupon the end portion (15) is everted round the end edge (4). Gripping parts (12) of a second element (2) with a second passage (34) are then inserted in the second organ (16) via the aperture (17). Finally, the first element (1) with the everted portion (15) of the first organ is inserted in the second passage (34), whereby the gripping parts (12) are influenced in such a manner that they come into engagement with the inside of an edge portion (39) of the aperture (17). A device for implementation of the method.

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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

Declaration under Rule 4.17:

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

In application No.
PCT/NO 03/00258

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: A61F 2/06 // A61B 17/11

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: A61B, A61F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC INTERNAL, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0723766 A1 (CORDIS EUROPA N.V.), 31 July 1996 (31.07.96) --	7-19
A	WO 0027311 A1 (ST. JUDE MEDICAL CARDIOVASCULAR GROUP, INC.), 18 May 2000 (18.05.00), figures 26-31 --	7-19
A	WO 0134037 A1 (ONUX MEDICAL, INC.), 17 May 2001 (17.05.01), figures 4a-4l, abstract --	7-19
A	WO 0170090 A2 (BY-PASS, INC.), 27 Sept 2001 (27.09.01), figure 5c, abstract --	7-19

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search

24 October 2003

Name and mailing address of the ISA/
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Date of mailing of the international search report

30-10-2003

Authorized officer

Leif Brander/Els
Telephone No. +46 8 782 25 00

INTERNATIONAL SEARCH REPORT

In application No.
PCT/NO 03/00258

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2737653 A1 (B BRAUN CELSA SOCIETE ANONYME), 14 February 1997 (14.02.97) --	7-19
A	US 5366462 A (ROBERT L. KASTER ET AL), 22 November 1994 (22.11.94), figures 10-19 --	7-19
A	US 6419681 B1 (JAIME VARGAS ET AL), 16 July 2002 (16.07.02), figures 1-2, 31-32 -- -----	7-19

INTERNATIONAL SEARCH REPORT

1 application No.
03/00258

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 1-6
because they relate to subject matter not required to be searched by this Authority, namely:
Methods for treatment of the human or animal body by surgery or therapy (PCT Rule 39.1(iv)).
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/09/03

In

1 application No.

PCT/NO 03/00258

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
EP	0723766	A1	31/07/96	AU 2319295 A	16/11/95
				CA 2167425 A	27/07/96
				DE 69505246 D,T	17/06/99
				EP 0756731 A,B	05/02/97
				JP 8299451 A	19/11/96
				NL 9500147 A	02/09/96
				US 5741324 A	21/04/98
WO	0027311	A1	18/05/00	AU 1466300 A	29/05/00
				EP 1124506 A	22/08/01
				JP 2002529140 T	10/09/02
				US 6152937 A	28/11/00
				US 6508822 B	21/01/03
				US 6599303 B	29/07/03
				US 6620176 B	16/09/03
WO	0134037	A1	17/05/01	AU 1463701 A	06/06/01
				CA 2393799 A	17/05/01
				EP 1233704 A	28/08/02
				JP 2003513696 T	15/04/03

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/09/03

In application No.

PCT/NO 03/00258

Patent document cited in search report			Publication date	Patent family member(s)	Publication date
WO	0170090	A2	27/09/01	AU 3313600 A	09/10/00
				AU 4449601 A	03/10/01
				AU 4449701 A	03/10/01
				AU 7552500 A	18/06/01
				AU 7552700 A	18/06/01
				BR 0016247 A	27/08/02
				CA 2393486 A	14/06/01
				CA 2393508 A	14/06/01
				CA 2403289 A	27/09/01
				EP 1237485 A	11/09/02
				EP 1259169 A	27/11/02
				EP 1265535 A	18/12/02
				JP 2003515416 T	07/05/03
				WO 0141623 A	14/06/01
				WO 0141624 A	14/06/01
				WO 0170091 A	27/09/01
				AU 2877401 A	03/10/01
				AU 2877901 A	03/10/01
				AU 3313800 A	09/10/00
				BR 0009172 A	18/12/01
				BR 0109404 A	03/06/03
				CA 2366708 A	28/09/00
				CA 2403119 A	27/09/01
				CA 2403506 A	27/09/01
				EP 1171044 A	16/01/02
				EP 1265536 A	18/12/02
				EP 1289430 A	12/03/03
				IL 145431 D	00/00/00
				JP 2002538926 T	19/11/02
				NZ 514745 A	29/08/03
				WO 0247561 A	20/06/02
				AU 1423702 A	24/06/02
				AU 9584701 A	22/04/02
				CA 2425336 A	18/04/02
				CA 2431405 A	20/06/02
				IL 144051 D	00/00/00
				WO 0230172 A	18/04/02
				WO 0247532 A	20/06/02
				US 2003060876 A	27/03/03
				WO 0170118 A	27/09/01
FR	2737653	A1	14/02/97	DE 69626161 D	00/00/00
				EP 0759287 A,B	26/02/97
US	5366462	A	22/11/94	AT 207723 T	15/11/01
				AU 4803593 A	28/02/95
				DE 69331066 D	00/00/00
				EP 0713373 A,B	29/05/96
				US 5234447 A	10/08/93
				US 5403333 A	04/04/95
				WO 9504503 A	16/02/95

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/09/03

Inventor's application No.

PCT/NO 03/00258

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6419681 B1	16/07/02	AU 5143000 A	05/12/00
		US 6537288 B	25/03/03
		US 2002042622 A	11/04/02
		WO 0069364 A	23/11/00
		AU 5150500 A	05/12/00
		AU 5150600 A	05/12/00
		AU 5588200 A	05/12/00
		DE 10084618 T	08/05/02
		DE 10084620 T	06/06/02
		US 6371964 B	16/04/02
		US 6428550 B	06/08/02
		US 2002077637 A	20/06/02
		WO 0069343 A	23/11/00
		WO 0069346 A	23/11/00
		WO 0069349 A	23/11/00
